AMENDMENTS TO SPECIFICATION

Page 1, indicated line 13, insert the heading:

--BACKGROUND OF THE INVENTION--.

Page 5, line 36, insert the heading:

--BRIEF SUMMARY OF THE INVENTION--.

Page 9, line 2, insert the heading:

--BRIEF DESCRIPTION OF THE DRAWINGS--.

Page 9, line 11, insert the heading:

--DETAILED DESCRIPTION OF THE DRAWINGS--.

Amend the material on page 10, lines 1-16, as follows:

In Figure 5, the following designations are used:

~~1~~	21	Supply of liquid fuel
~~2~~	22	Fuel injection nozzle
~~3~~	23	Partial oxidation catalyst
~~4~~	24	Partial gas stream
~~5~~	25	Deflecting cap
~~6~~	26	Gas exit from the partial oxidation catalyst

~~7~~ 27 Space between converter housing and partial oxidation catalyst

~~8~~ 28 Converter housing

~~9~~ 29 Exit of the product stream

~~10~~ 30 Heating element, e.g. glow plug

~~11~~ 31 Spring

~~12~~ 32 Seal

33 Thermocouple

Amend the paragraphs on page 12, beginning on line 34, through page 14, line 22, as follows:

The structure of the converter is shown in Figure 5. Diesel fuel is withdrawn from the engine's own fuel injection system via a bypass line (Fig. 2-4: 19), preferably on its low-pressure side, and is metered in liquid form into an evaporator pipe in the converter (Fig. 5, ~~1-2~~ 21-22). The evaporator pipe consists of a cylindrical recess in the interior of a catalytic converter for the partial oxidation of the fuel ~~(3)~~ 23, which catalytic converter is preferably designed as a honeycomb element. By transfer of the heat of reaction from this catalytic converter into the evaporator pipe, the partial gas stream ~~(4)~~ 24 introduced in parallel. The advantage of the addition in the

converter is the vaporization of the fuel with the aid of the heat of reaction of the partial oxidation. This makes it possible to achieve a substantially more homogeneous distribution of the fuel in the partial gas stream than in the case of the addition before the converter, and hence an optimized yield of oxidation product.

At the end of the evaporator pipe, the fuel-containing gas stream is deflected by a mounted cap ~~(5)~~ 25 into the outer part of the catalytic converter ~~(3)~~ 23. At this point the fuel is partially oxidized with the aid of suitable active materials to give oxidation products, preferably to give carboxylic acids or their anhydrides, particularly preferably to give MAA or maleic acid. At the opposite exit ~~(6)~~ 26, the gas stream is deflected again and passes into the volume ~~(7)~~ 27 between converter housing ~~(8)~~ 28 and catalytic converter. From there, it is passed into the exhaust gas line of the vehicle ~~(9)~~ 29.

Opposite the injection nozzle, a heating element ~~(10)~~ 30, preferably a glow plug, is arranged in the evaporator pipe. The heating element is supplied by the on-board power supply of the vehicle, as a rule an automobile battery, and serves for initiating the partial oxidation when the vehicle is started: on the one hand, the active material is heated to the required

operating temperature so that autothermal operation is possible. On the other hand, the heating element initially serves for vaporizing the injected fuel. Arranged around the inlet nozzle of the heating element is a spring ~~(11)~~ 31 with the aid of which the arrangement comprising catalytic converter and deflecting cap is pressed against a seal ~~(12)~~ 32 in order to ensure that the gas streams travel in the manner described above.

For constant control of the converter temperature, the ratio of gas stream and metered amount of fuel is kept constant. The converter temperature is measured by a thermocouple ~~(13)~~ 33 which is inserted into the interior of the partial oxidation catalyst. Said converter temperature is obtained physically from the ratio of the virtually constant heat capacity of the partial gas stream and the likewise constant heat of reaction. If their ratio is constant, the temperature in the interior of the converter is also constant. At a converter temperature of 400°C and with complete conversion of the diesel fuel, a maximum yield of MAA is achieved. At this temperature, the heat load of adjacent components of the engine is substantially reduced compared with operation at higher temperatures. Expensive shielding of the converter can therefore be dispensed with.